

Fig. 1

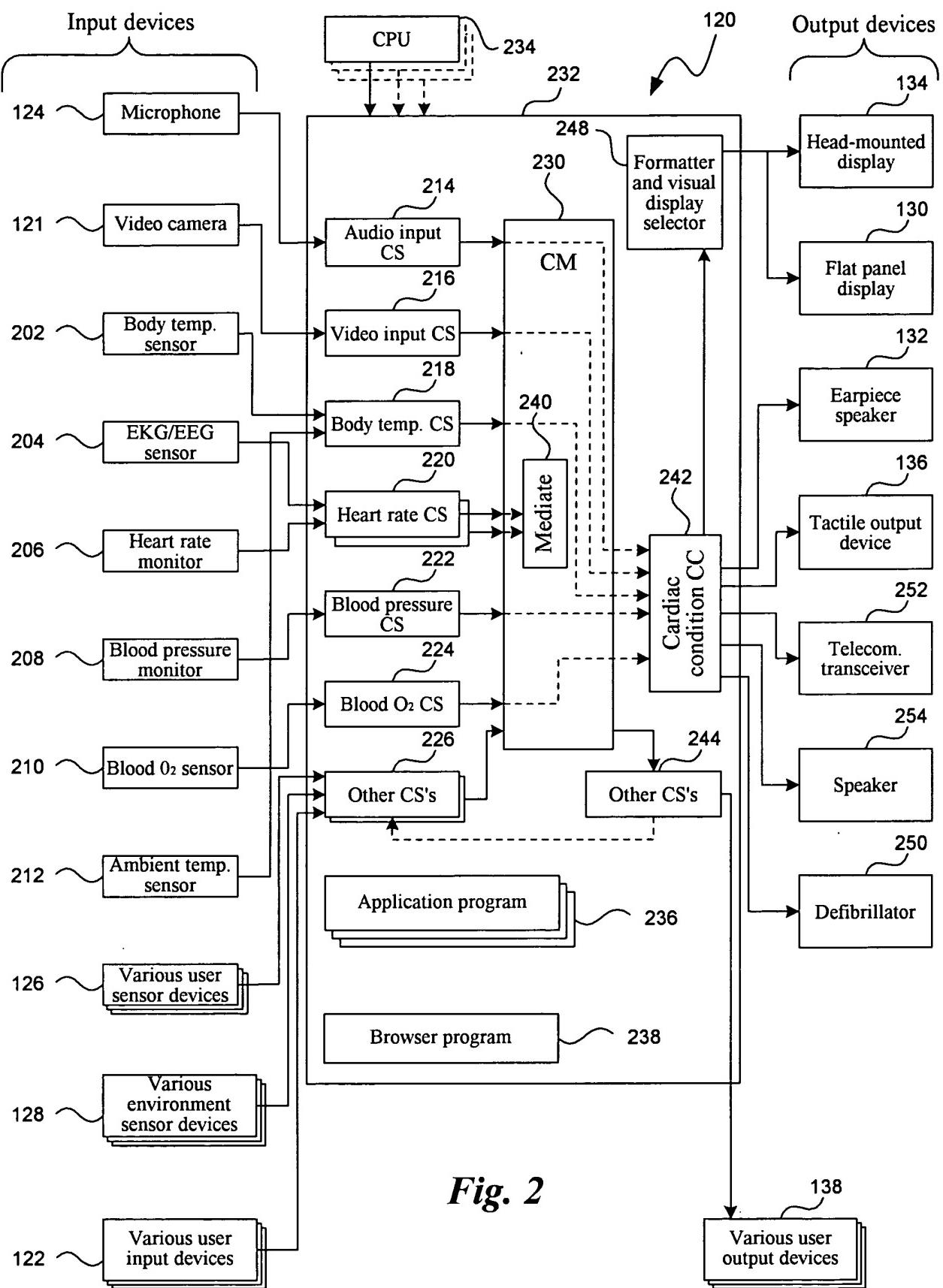


Fig. 2

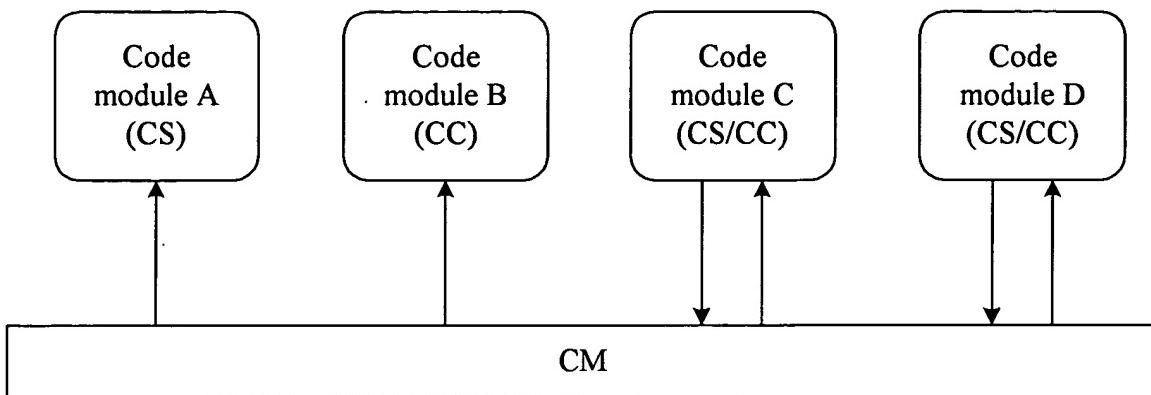


Fig. 3

300

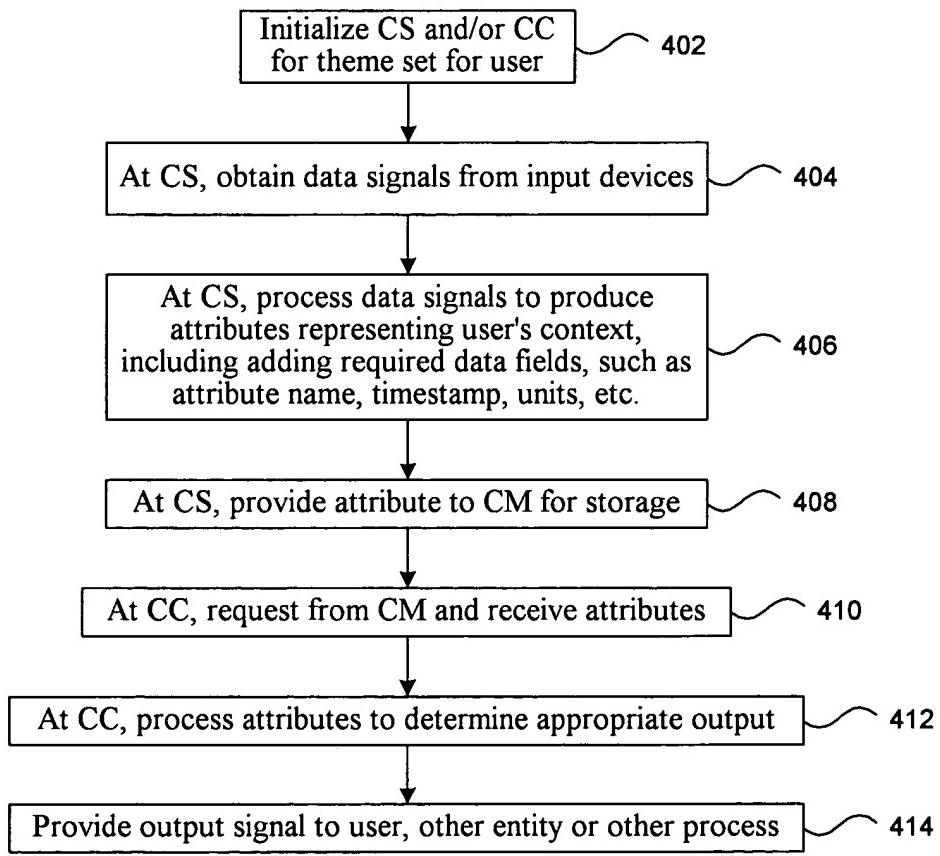


Fig. 4

400

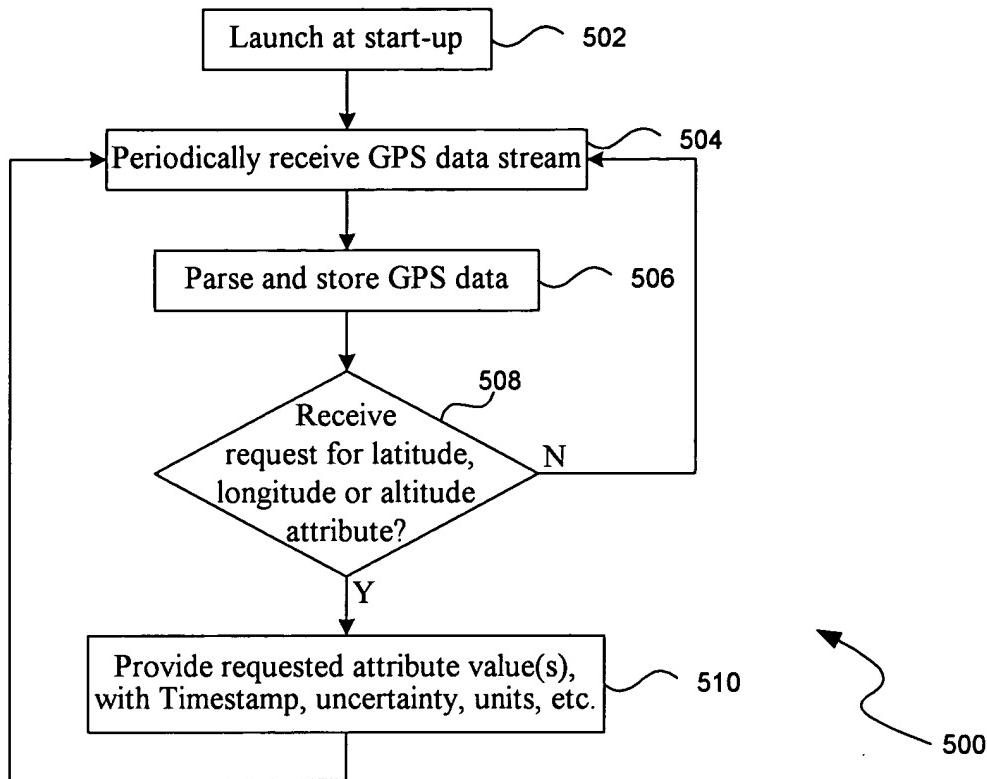


Fig. 5A

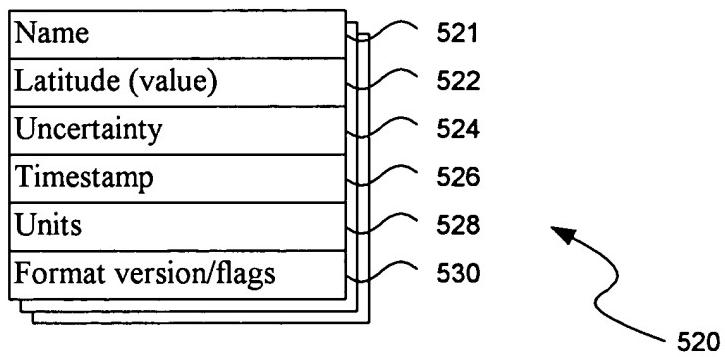


Fig. 5B

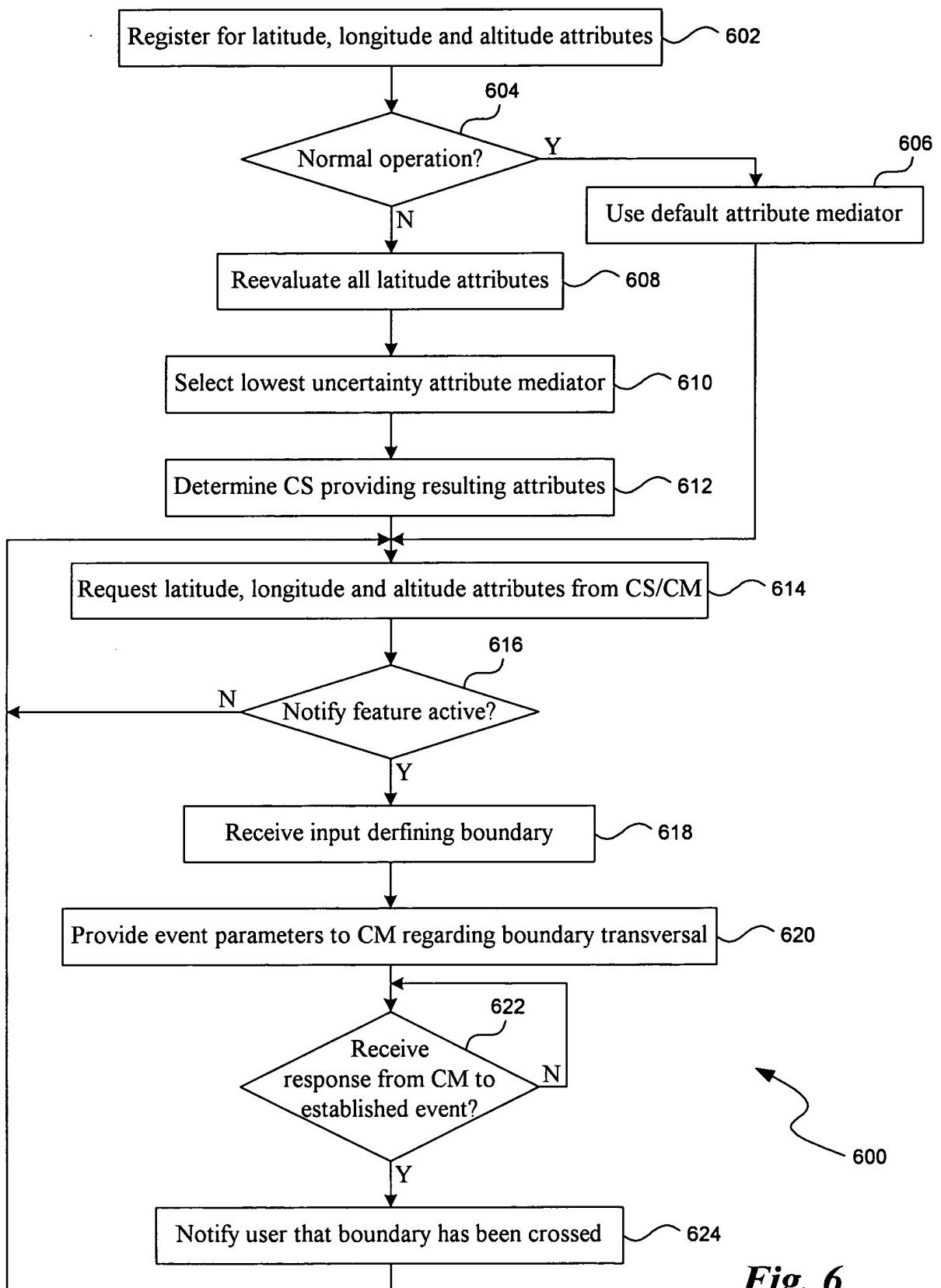


Fig. 6

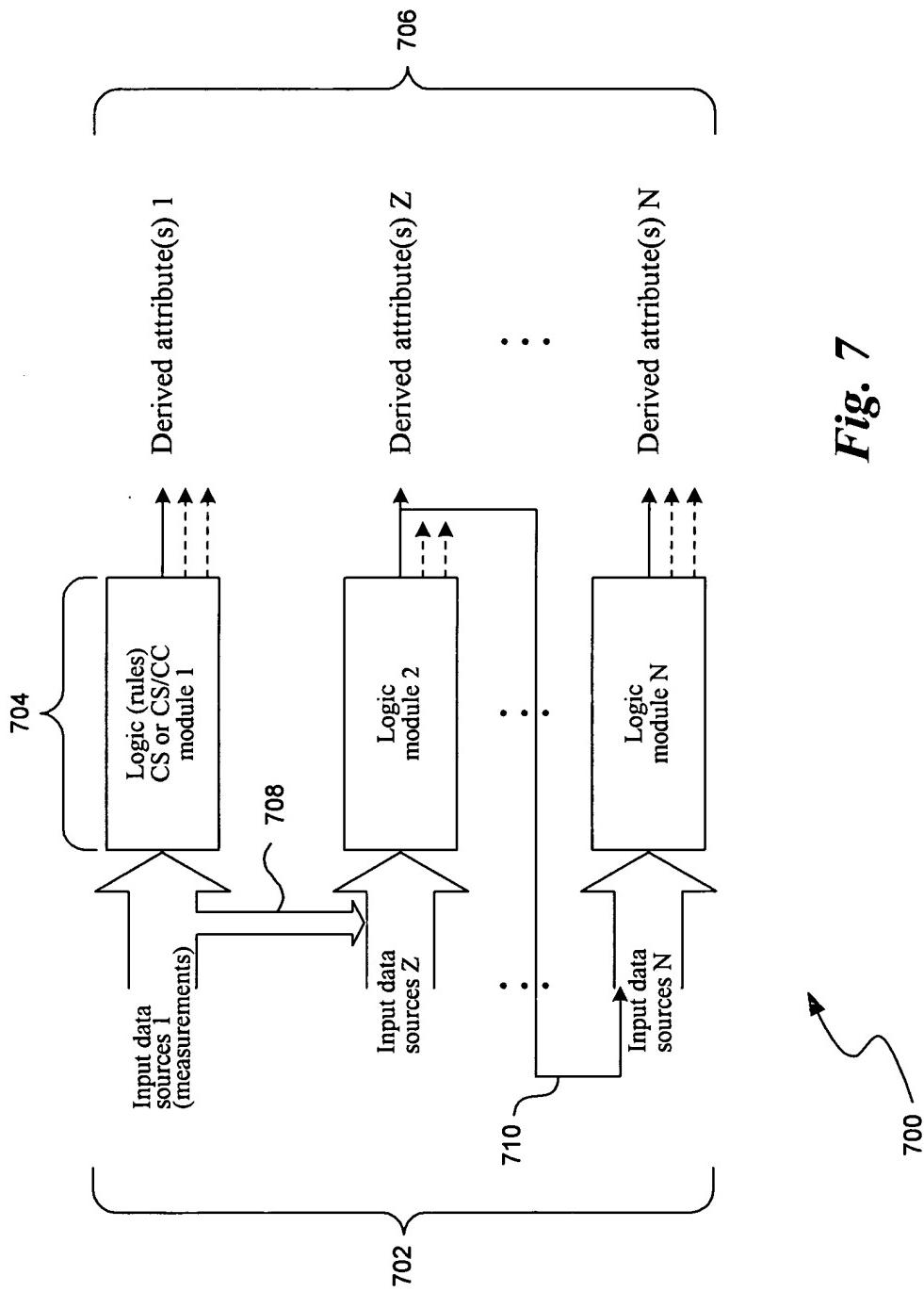


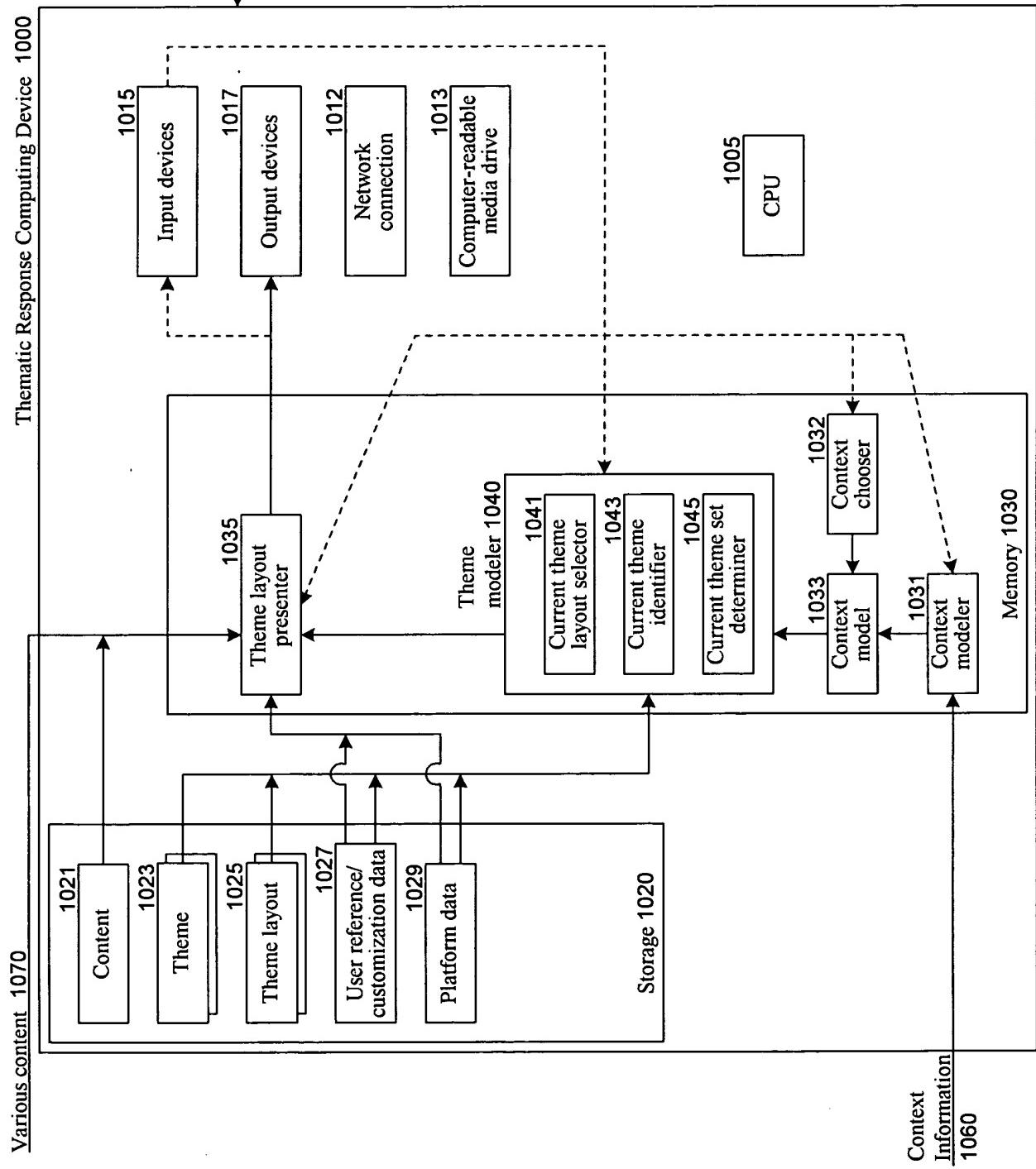
Fig. 7

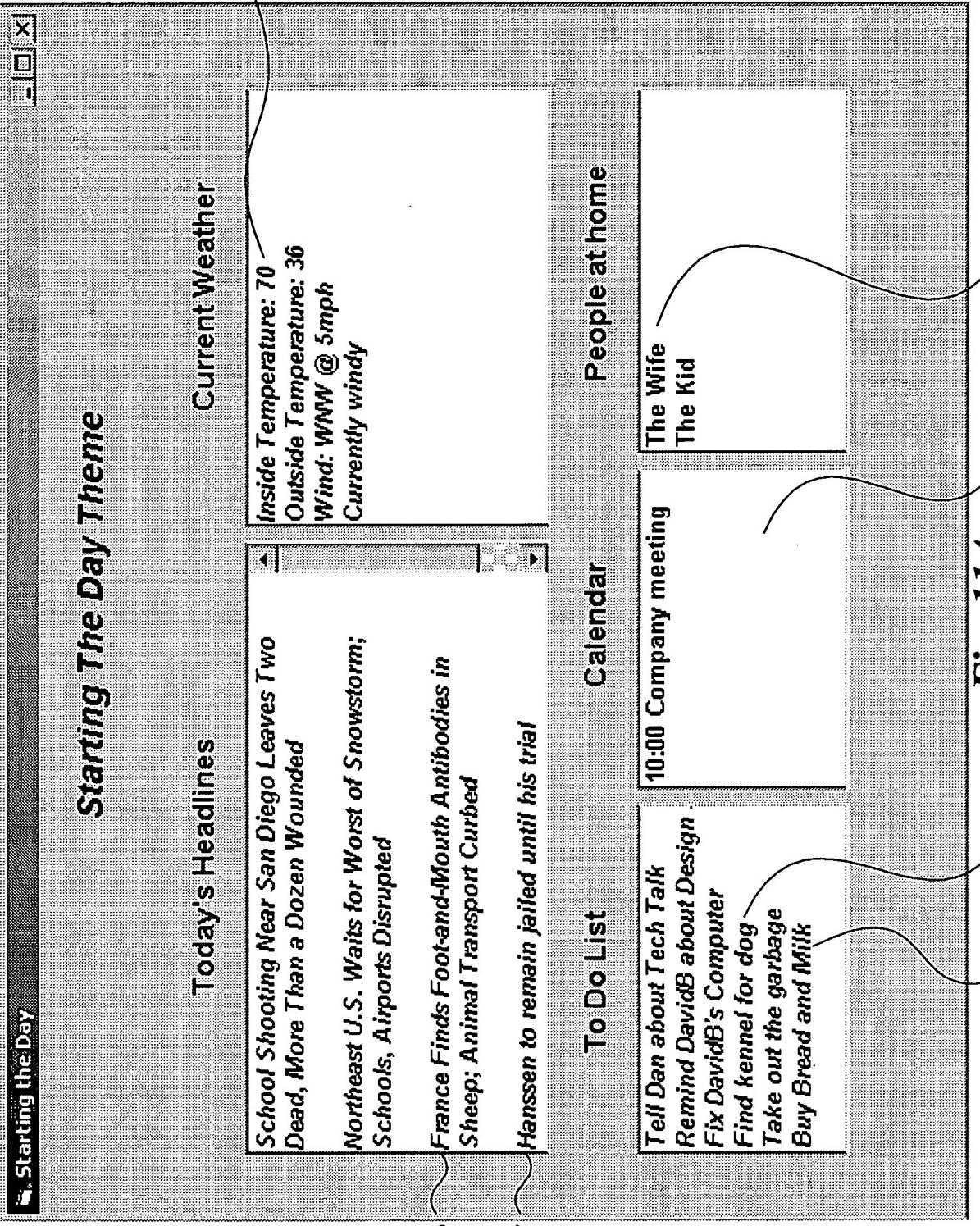
Fig. 8

User.	Platform. (continued)
Desired_privacy_level	CPU.
Interruptibility	Load
Speed	Speed
Direction	Memory.
Acceleration	Total_capacity
Availability.	Used
Cognitive_availability	Storage.
Tactile_availability	Total_capacity
Manual_availability	Used
Visual_availability	Connectivity.
Oral_availability	Connection_status
Auditory_availability	Connection_speed
Proximity.<Item or place name>	Connection_type/device
Mood.	Connection_activity
Happiness	Power.
Sadness	Power_source
Anger	Power_level
Frustration	
Confusion	Environment.
Activity.	People.
Driving	Nearest
Eating	Number_present
Running	Number_close
Sleeping	
Talking	Local.
Typing	Time
Walking	Date
Location.	Temperature
Place_name	Pressure
Latitude	Wind_speed
Longitude	Wind_direction
Altitude	Absolute_humidity
Room	High_forecast_temperature
Floor	Low_forecast_temperature
Building	People_present
Address	Ambient_noise_level
Street	Ambient_light_level
City	Days.<previous or future>.
County	High_temperature
State	Low_temperature
Country	Precipitation_type
Postal_Code	Precipitation_amount
Destination. (same as User.Location.)	Place.<place name>. (same as Environment.Local)
Physiology.	
Pulse	Application.
Body_temperature	Mail.
Blood_pressure	Available
Respiration	New_messages_waiting
Person.<name or ID>. (same as User.)	Messages_waiting_to_be_sent
Platform.	Phone.
UI.	Available
Oral_input_device_availability	In_use
Manual_input_device_availability	On/off
Tactile_output_device_availability	Notification_mechanism
Visual_output_device_availability	Call_incoming
Auditory_output_device_availability	Caller_ID
	Sound_recorder.
	Available
	Recording

Fig. 9

User Setting	Computer
Mental Context	Power
Meaning	Configuration
Cognition	User Input Systems
Divided User Attention	Hand/Haptic
Task Switching	Keyboard/Keystrokes
Background Awareness	Voice/Audio
Solitude	Eye Tracking
Privacy	Cursors
Desired Privacy	Axis
Perceived Privacy	Resolution
Social Context	Selection
Affect	Invocation
Physical Situation	Accelerators
Body	Output Systems
Biometrics	Visual
Posture	Resolution
Motion	Audio
Physical Encumberment	Public/Private
Senses	Haptic
Eyes	External Resources
Ears	I/O devices
Tactile	Connectivity
Hands	Data
Nose	Quantity/State
Tongue	Urgency/Importance
Workload demands/effects	Use of Prominence
Interaction with computer devices	Modality
Interaction with people	Sensitivity/Purpose
Physical Health	Privacy Issues
Environment	Use of Association
Time/Space	Use of Safety
Objects	Source/Ownership
Persons	Types
Audience/Privacy Availability	User generated
Scope of Disclosure	Other computers or people
Hardware affinity for privacy	Sensor
Privacy Indicator for User	PC State
Privacy Indicator for Public	Use of Association
Watching Indicator	
Being Observed Indicator	
Ambient Interference	
Visual	
Audio	
Tactile	

**Fig. 10**

**Fig. 11A**

Driving to Work

Driving To Work Theme

Tangis
1848 Westlake Ave N
Seattle, WA
47.636 N -122.34 W

1120

Directions

1. Start out 2nd Ave South on EYER GREEN POINT RD
 2. Turn left onto 1st Ave NE N K 24TH NT
 3. Turn left onto BELLAVILLE NT
 4. Take I-5: WA-520 WNW towards NKA'LL K
 5. Merge onto WA-520 NW
 6. Take I-5: I-5 NORTH then turn left toward C-11 NY C
 7. Merge onto I-5 S
 8. Take the WA-515 east, end number 154S, towards SCK MAIL HILL/NKA'LL AIN POKI
 9. Keep left at the fork in the road
 10. Turn right WA-515 NW
 11. Take the WA-59 east towards SEA TAC AIRPORT
 12. Follow I-5 E towards AIRPORT
 13. Merge onto N ENTRY DR
 14. Stay straight to the ticketing/checkout
 15. Stay straight to the ticketing/checkout
-
- 1121
- 1122
- 1123
- 1124
- 1125
- 1126
- 1127

First Meeting for the Day
10:00 Company Meeting

People to Call

John T (425)444-5555 LOI
Mark Smith (206)936-6214 SDE Offer

Fig. 11B

Arriving At Work

Arriving at Work Theme

People in the Building

Ancel Johnson

To Do List

Tell Dan about Tech Talk
Remind DavidB about Design spec deadline.
Fix DavidB's Computer
Call Mark Smith (206)936-6214 about Job Offer

Tangis Bulletin Board

1 Weekly Company meeting at 10:00pm
2 VIA demo at 3:00pm Penthouse. Everyone invited.
3 Who let my dog out? [Dan]
4 Extra ticket to Sonics/Lakers game tonight! [Josh]
5 Who used decaf on the non decaf container?!? [Alan]

Fig. 11C

TO DO LIST

At Work Theme	
Calendar	
8 am	
9:00	
10:00	⌚ Company Meeting
11:00	
12 pm	
1:00	
2:00	
3:00	⌚ VIA Demo
4:00	

To Do List
Tell Dan about Tech Talk
Remind David B about Design spec deadline
Fix David B's Computer
See Bill about networking problems
Call Mark Smith (200)936-6214 about SDE

People Around You
Bill Watson
Alan Housley
Dorothy B.

Fig. 11D

1135

Bill Watson Theme

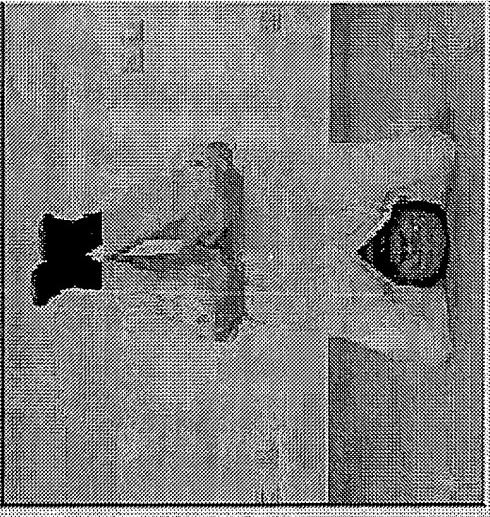
Bill Watson

Meet with Bill

Recognize

Contact/Information

Bill Watson
Married with Children



Reminders

See Bill about networking problems
Tell joke about Barbi.

Fig. 11E

Company Meeting

Meeting Theme

Things to bring up

Tell group what you did last week
Tell group what you plan to do this week
Tell group about your new invention.
Tell group about your upcoming skiing trip.
Kudos for Stan and Dorothy for finishing report

Notes

Finished coding Turing Machine on Monday.
Did bug bash on Tuesday.
Survived an earthquake on Wednesday.
Worked on CTK demo rest of last week
Continuing work on CTK demo rest of this week

People Present

Aaron Graves
Alan Housley
Ancel Johnson
Bill Watson
Brian Rose
Cesar Alvarez
Dan Newell
David Jukes
Dorothy B.
Jaquie T.
Jeff Fried
Jim Robarts
Johnson A.
Josh Freedman
Kanisha Patel
Ken Abbott
Lisa Davis
Molly Fitch
Scott Price
Stan Ement

1137

Fig. 11F

Τ Π Ε Τ Σ Η " Ε Σ Τ Σ Σ Ρ Σ Η

Meet with Bill

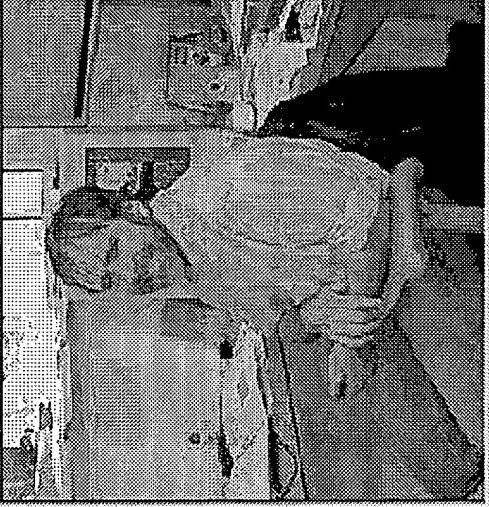
Dan Newell Theme

Dan Newell

Recognize

Contact Information

Dan Newell
Has met The Man
Married with 1 year old son



Reminders

- Ask him about his 90 day plan
- Tell joke about Barbi.
- Ask Dan about his watch.
- Tell Dan about Tech Talk.
- Invite Dan to Lunch.
- He owes you \$10.00

Fig. 11G

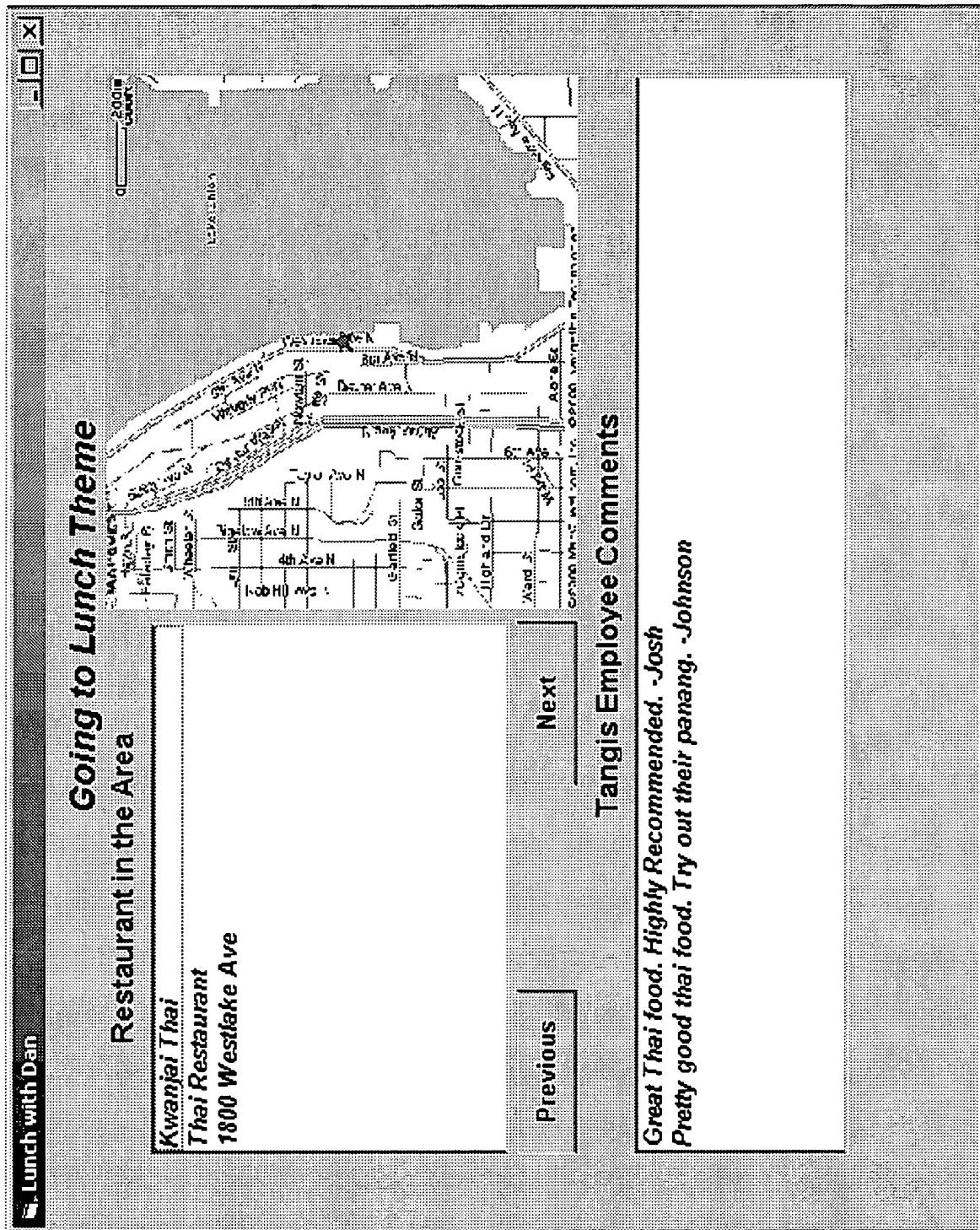


Fig. 11H

Repairing a PC Theme	
Computer Equipment	Josh's Computer ▾
Description	Notes
Dell XPS 4000 Purchase Date: 11/20/2000 Tangis Tag: PQ001	Currently inoperative Josh noticed a loud noise coming from the hard disk. He said it might be a problem with the disk's brake pads. If he mentions this again, humor him.
Software Installed	Office 2000 Visual Studios 6.0 MS Entertainment Pack Boeing Marketing Tutorial: How to talk like a techie
Hardware Installed	Creative Sound Blaster 10.0 card Ricoh 32X CDRW MS USB Microphone Intel TR1688 100Mbps Token Ring

Fig. III

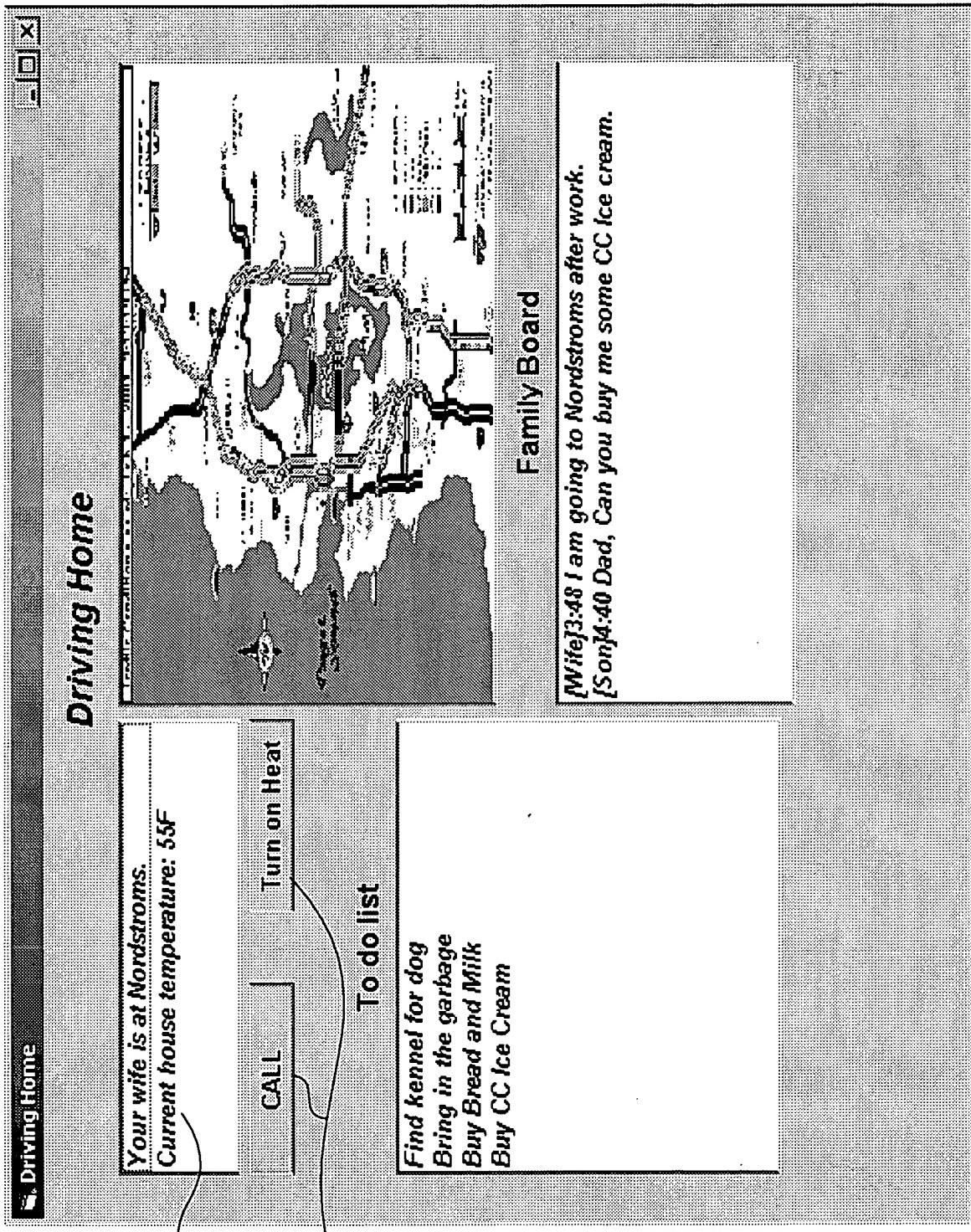


Fig. 11J

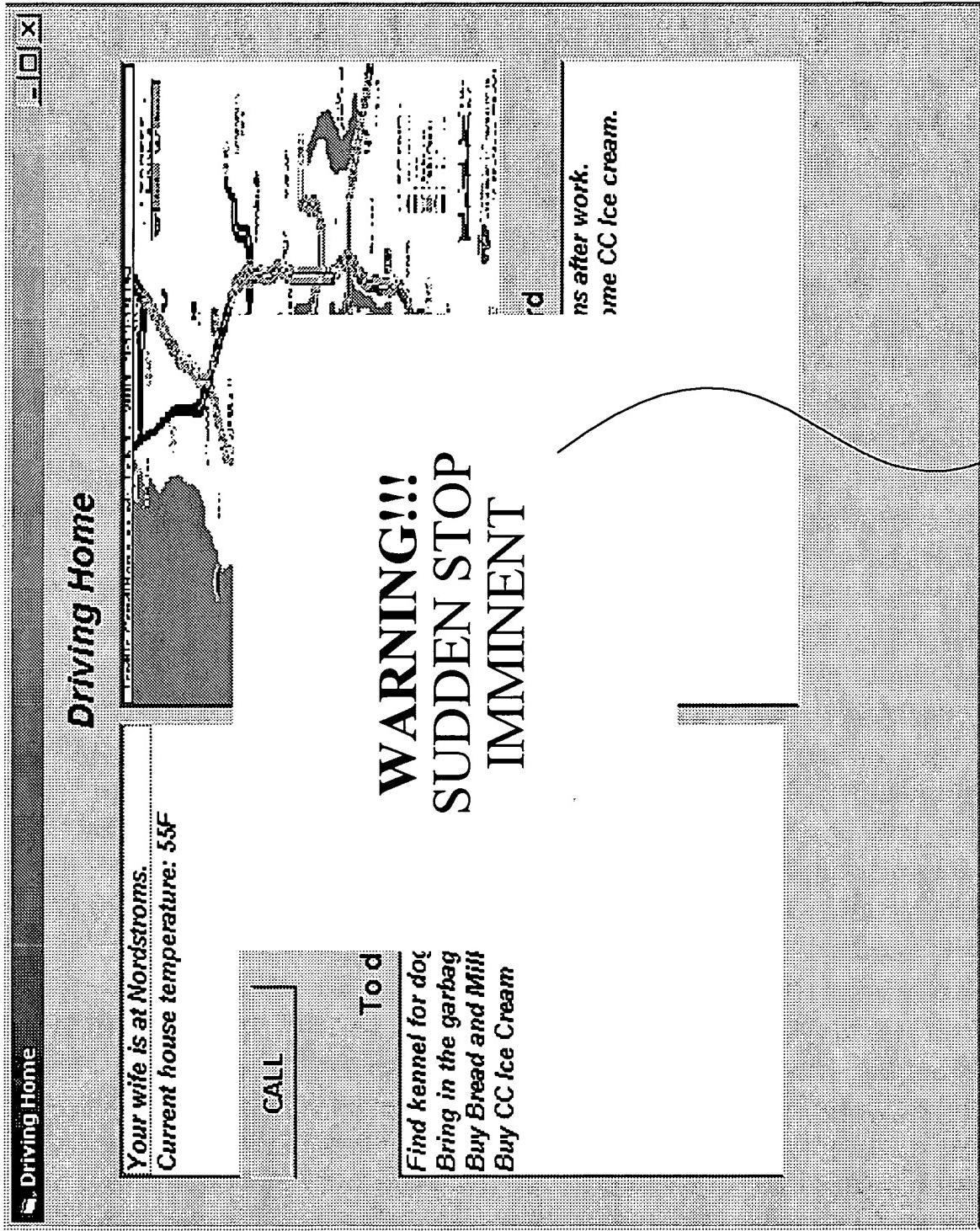


Fig. 11K 1190

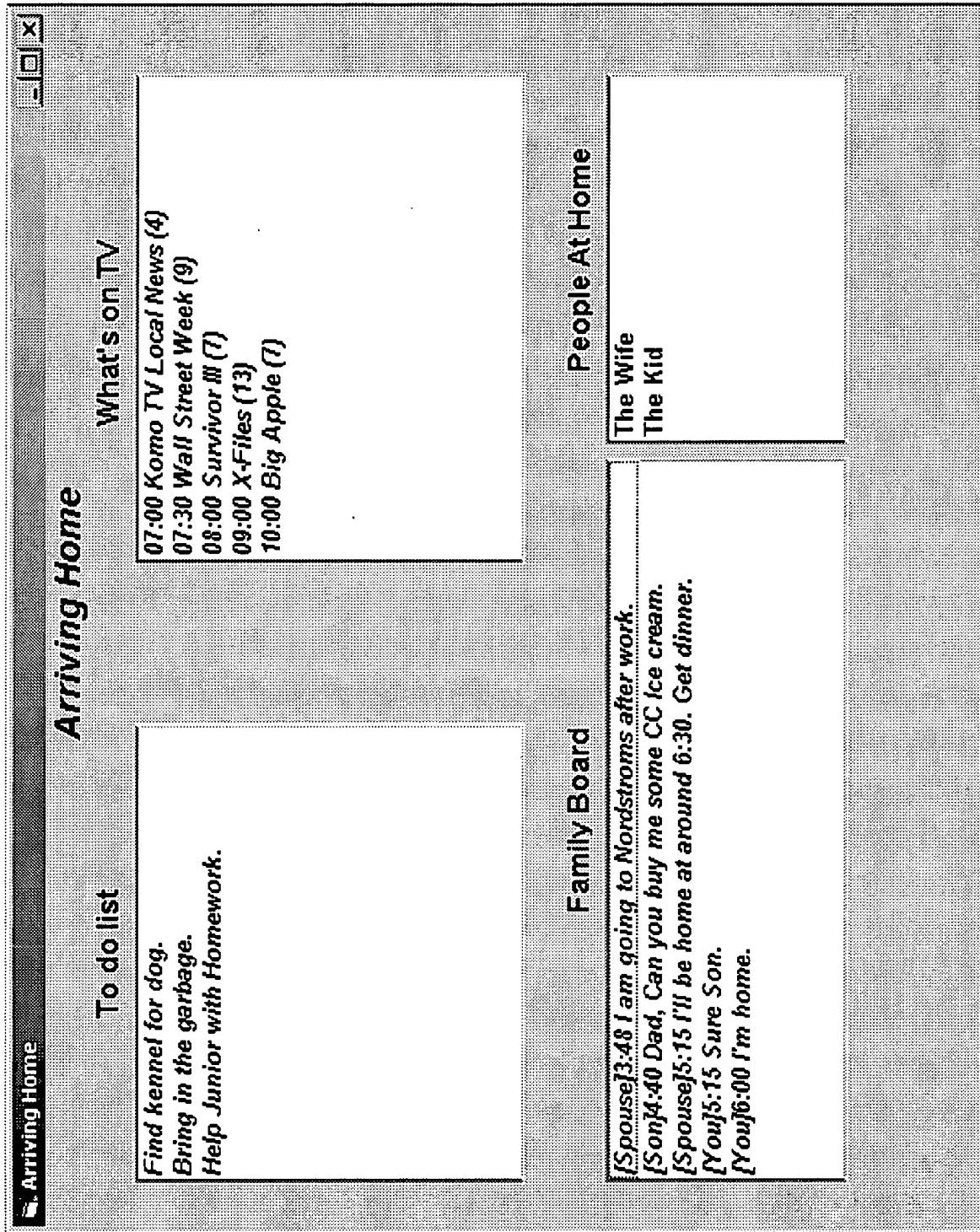


Fig. 11L

Example Current Theme Selection

Select A New Current Theme

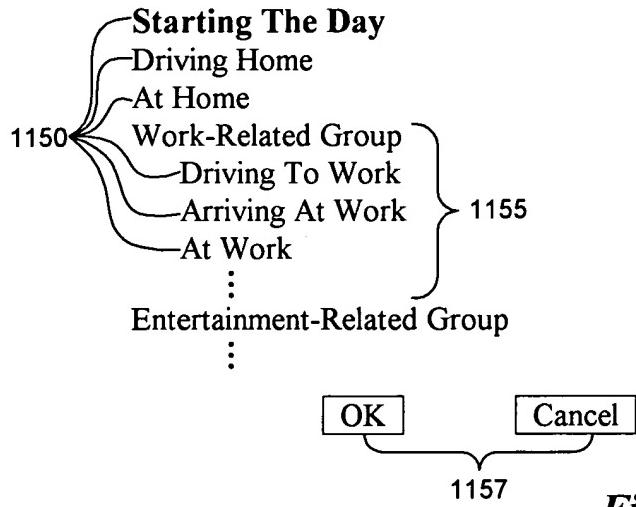


Figure 11M

Example Current Theme Set Modification

Current Theme Set

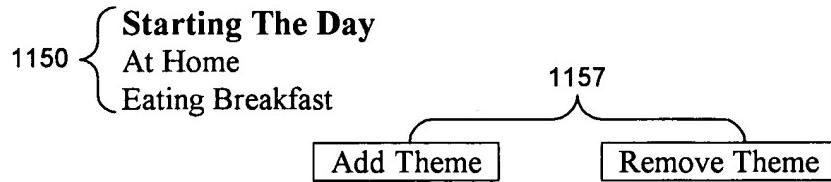


Figure 11N

Example Current Theme Layout Selection

Select A New Current Theme Layout

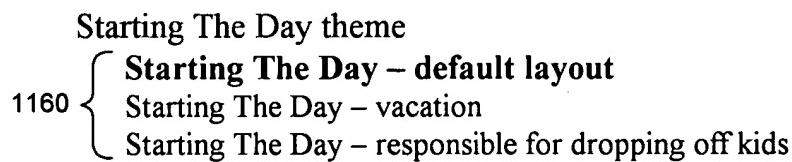


Figure 11O

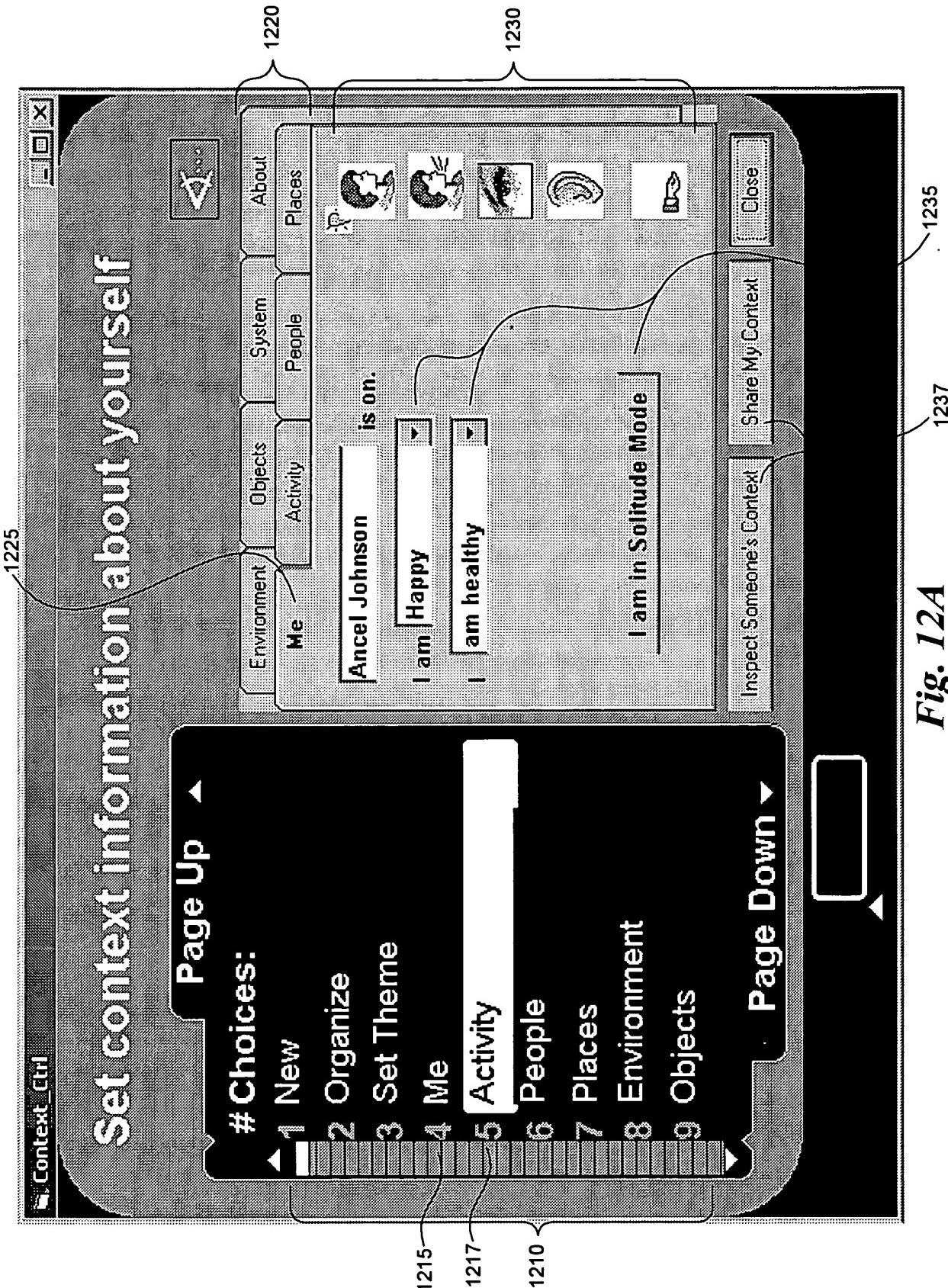


Fig. 12A

Context Ctrl

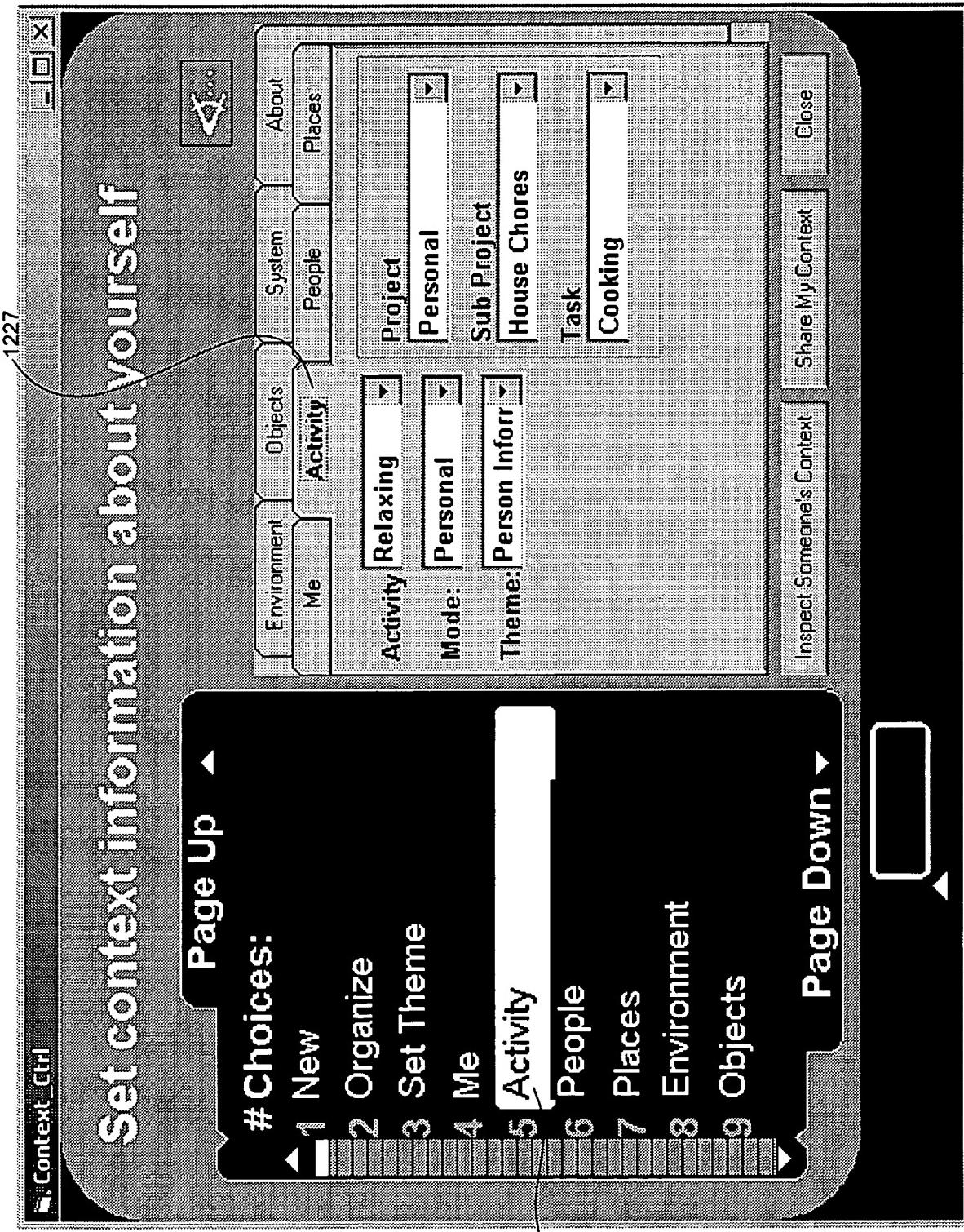


Fig. 12B

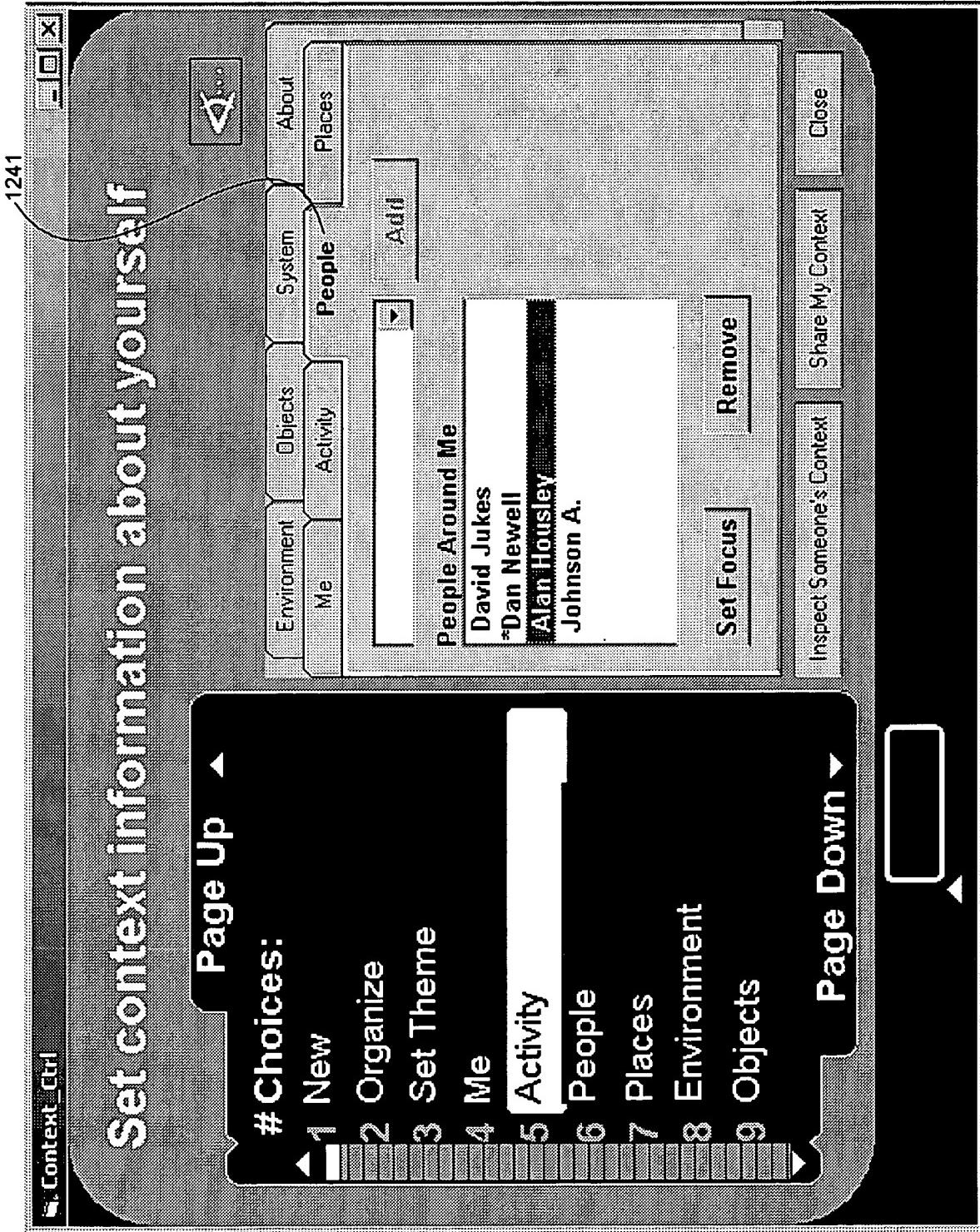
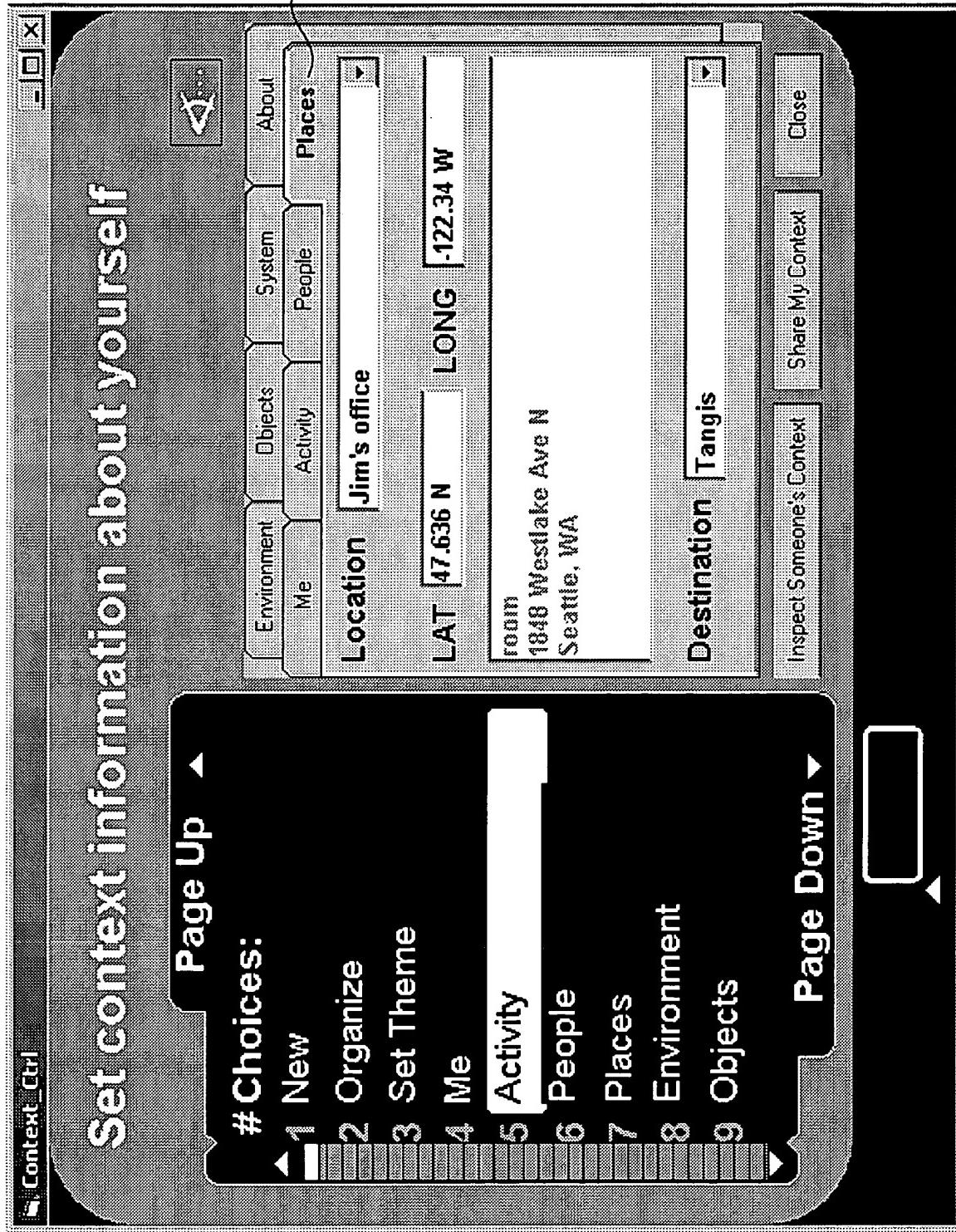


Fig. 12C

Fig. 12D



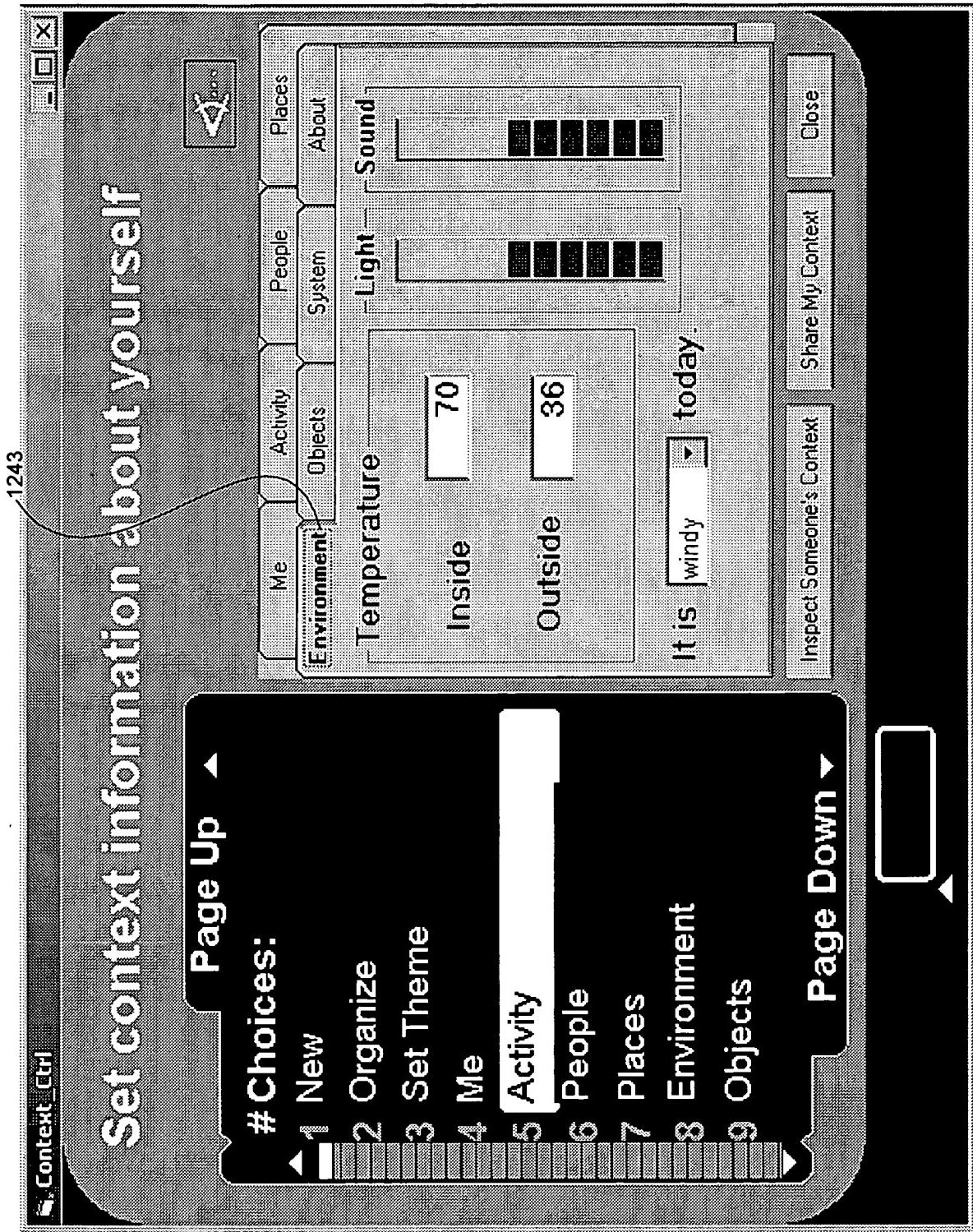


Fig. 12E

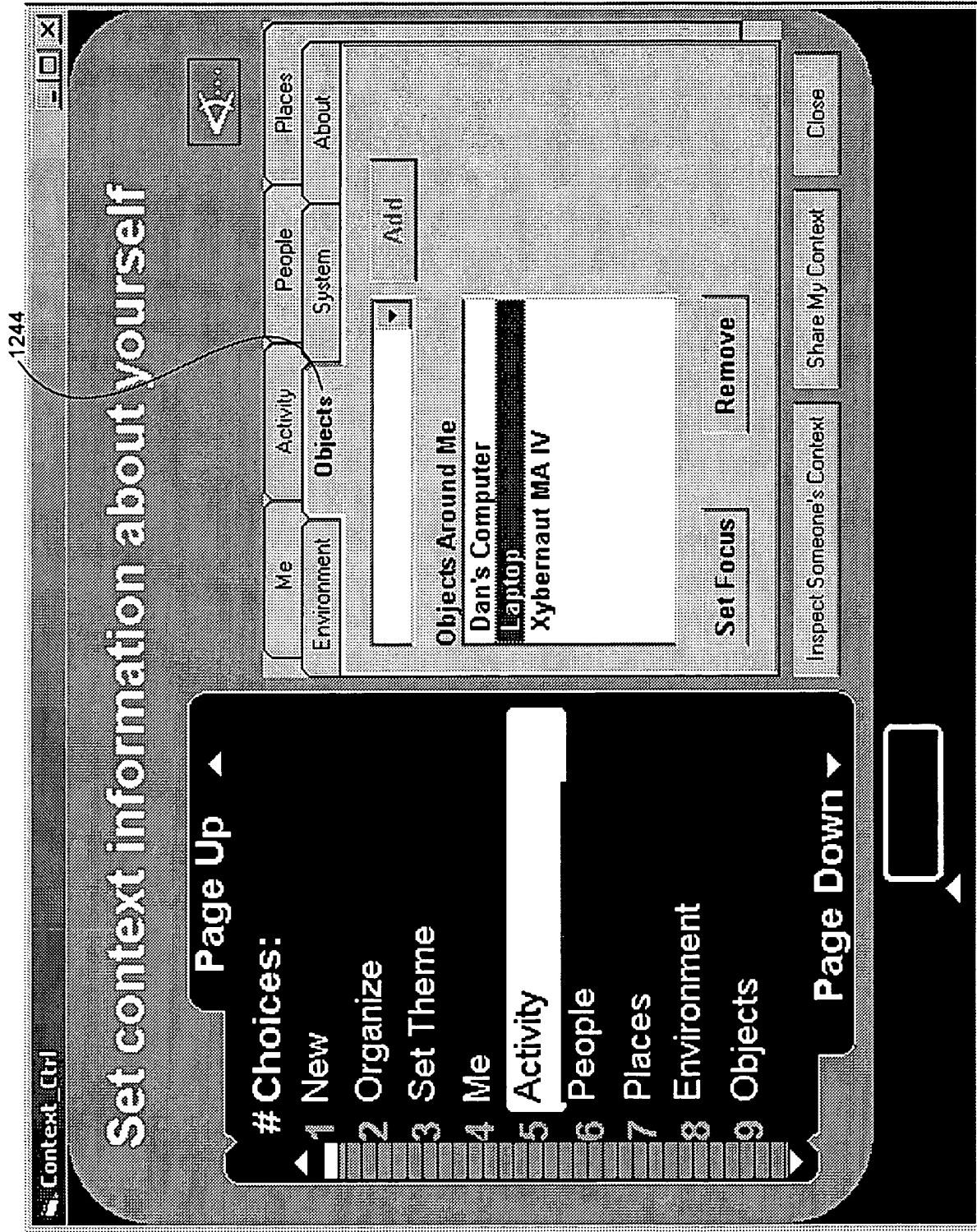


Fig. 12F

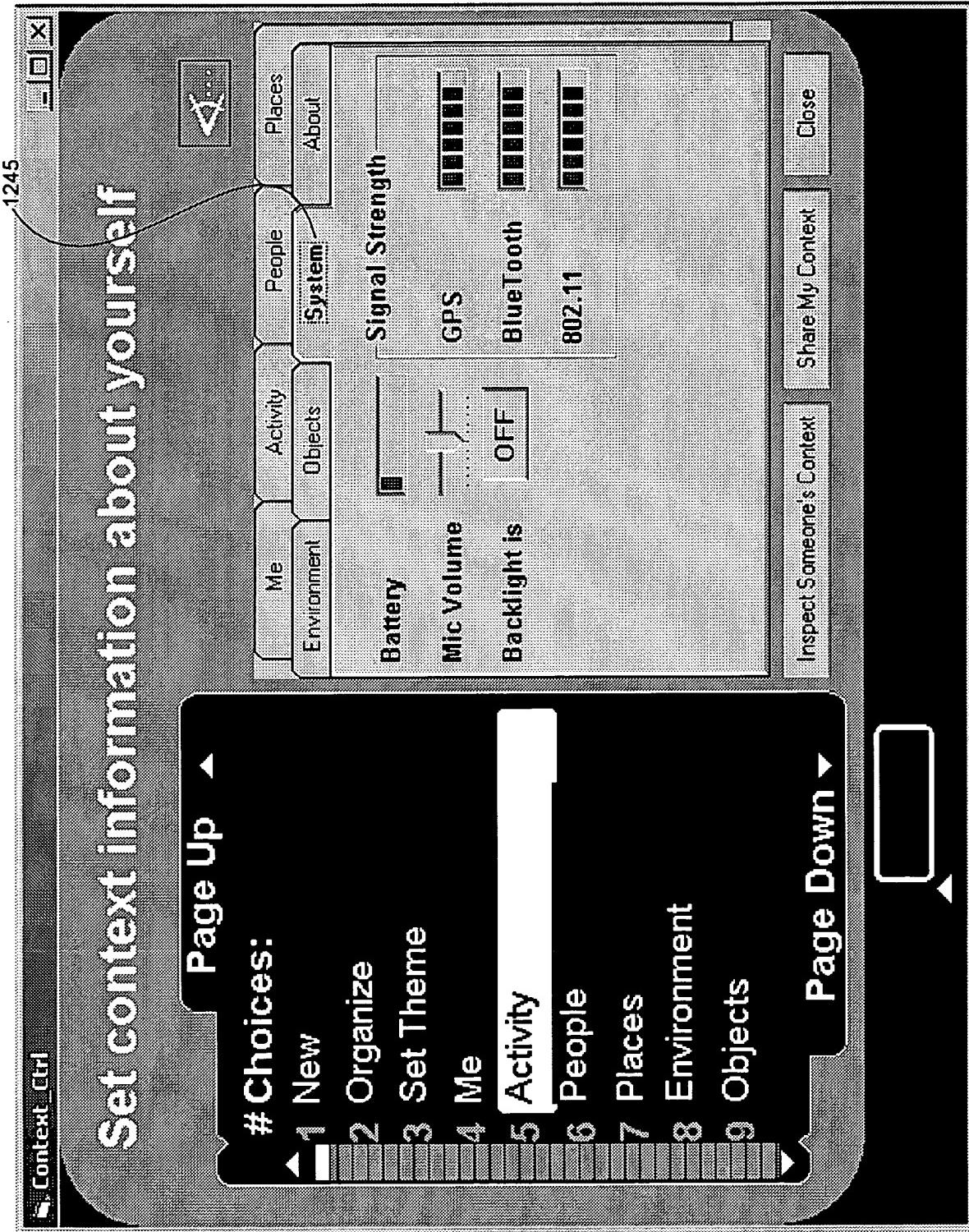


Fig. 12G

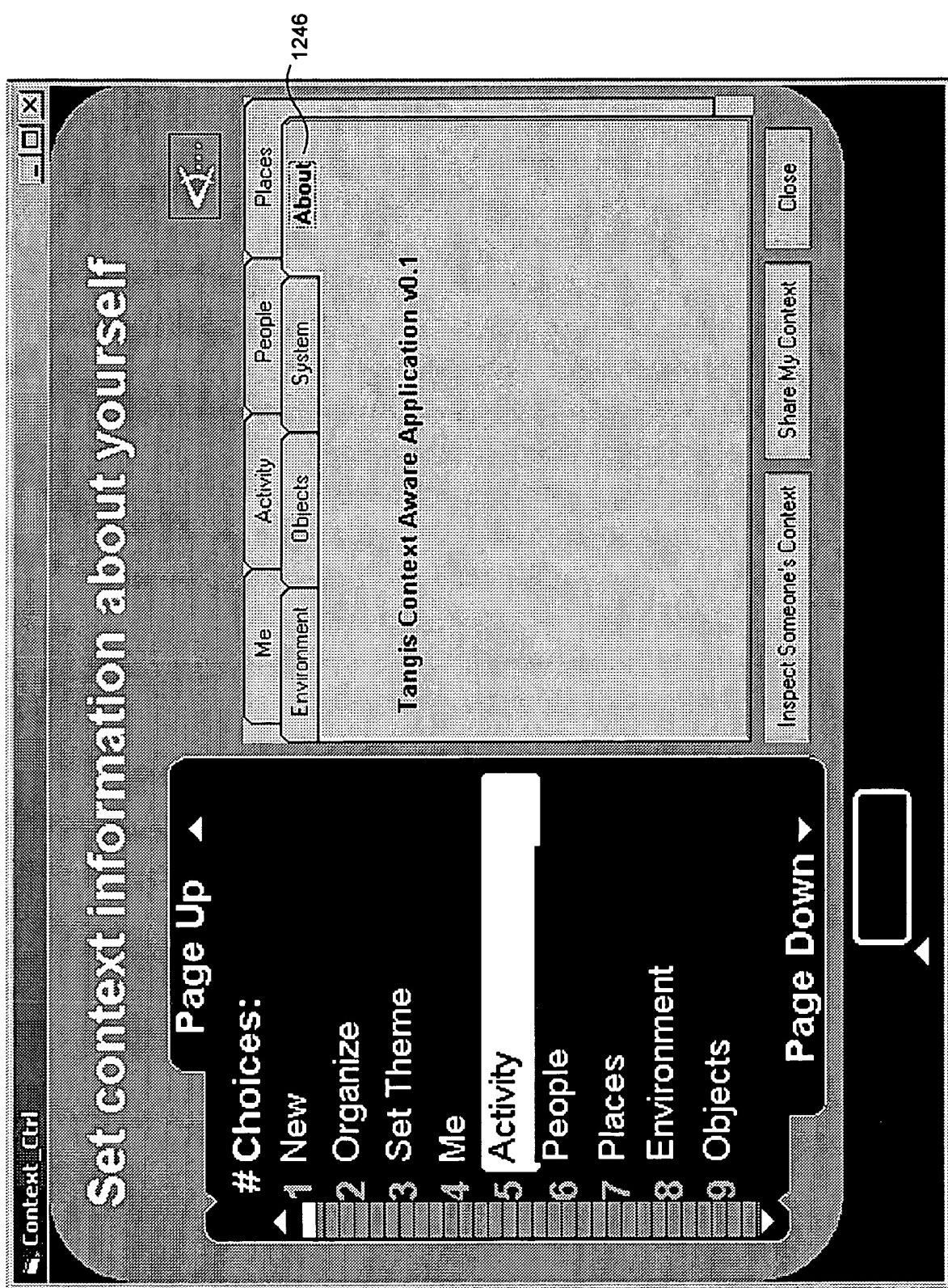


Fig. 12H

1302
1304

Example Theme Data Structure

1300

1305 ~	Name	Driving To Work
1310 ~	Description	Intent Is To Organize Both Driving Info & Info About Work Arrival
1315 ~	Security	Default: *****; Self: *****; . . .
1320 ~	Permission	Access: Self + Family + Friends + Source; Modification: Self; Copy: None; . . .
1325 ~	Privacy	Private
1330 ~	Priority	Medium
1335 ~	Group-ID	23
1340 ~	Time-Active	Mon-Fri, 06:00-11:00
1345 ~	Source	BCD Motor Company
1350 ~	Theme-Content	"BCD Motor logo.gif"
1355 ~	New-Attributes	DTW-BCD.driving-direction: (source = "BCD-DTW CS"); . . .
1360 ~	Theme-Matching	user.activity.driving = true (required); environment.local.time = 08:00-09:00 (optional); DTW-BCD.driving-direction = NOT "South" (required); . . .
1365 ~	Theme-Logic	IF <user.activity.driving> AND user.location.latitude > recent.user.location.latitude THEN DTW-BCD.driving-direction = "North"; IF DTW-BCD.driving-direction = "East" THEN Alert("You're Lost Again!!"); SET user.location[Access] = Family & Co-workers; . . .
1370 ~	Attribute-Set	<link>; . . . <link> : :

Attribute 1		Attribute N	
Name	user.activity.driving	Name	DTW-BCD.driving-direction
Value	True	Value	West
Uncertainty	High	Uncertainty	None
Timestamp	07:32 03/24/XX	Timestamp	08:13 03/24/XX
Units	boolean	Units	North, North by Northeast, . . .
Access	Family	Access	Self
:		:	

Fig. 13

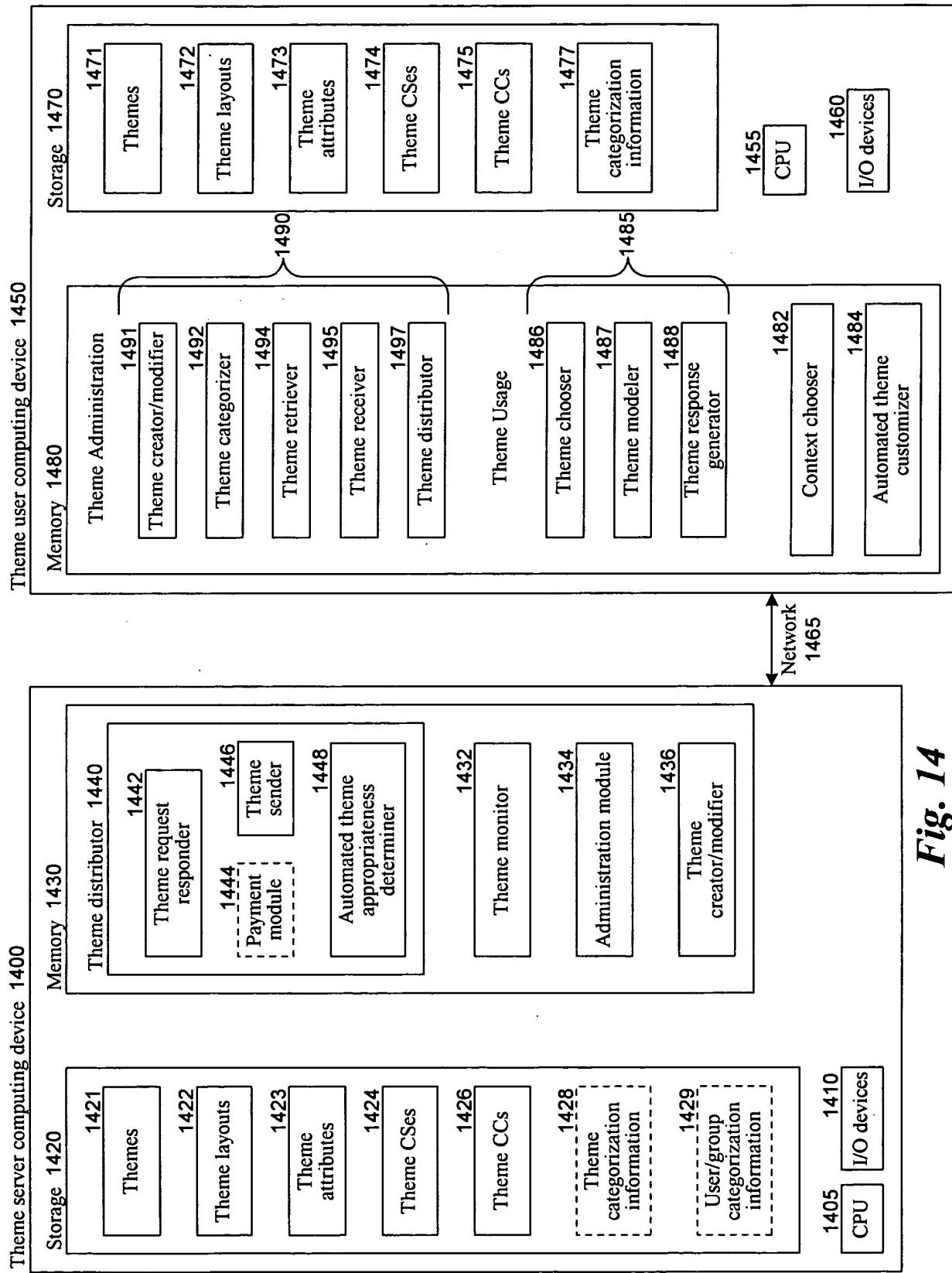


Fig. 14

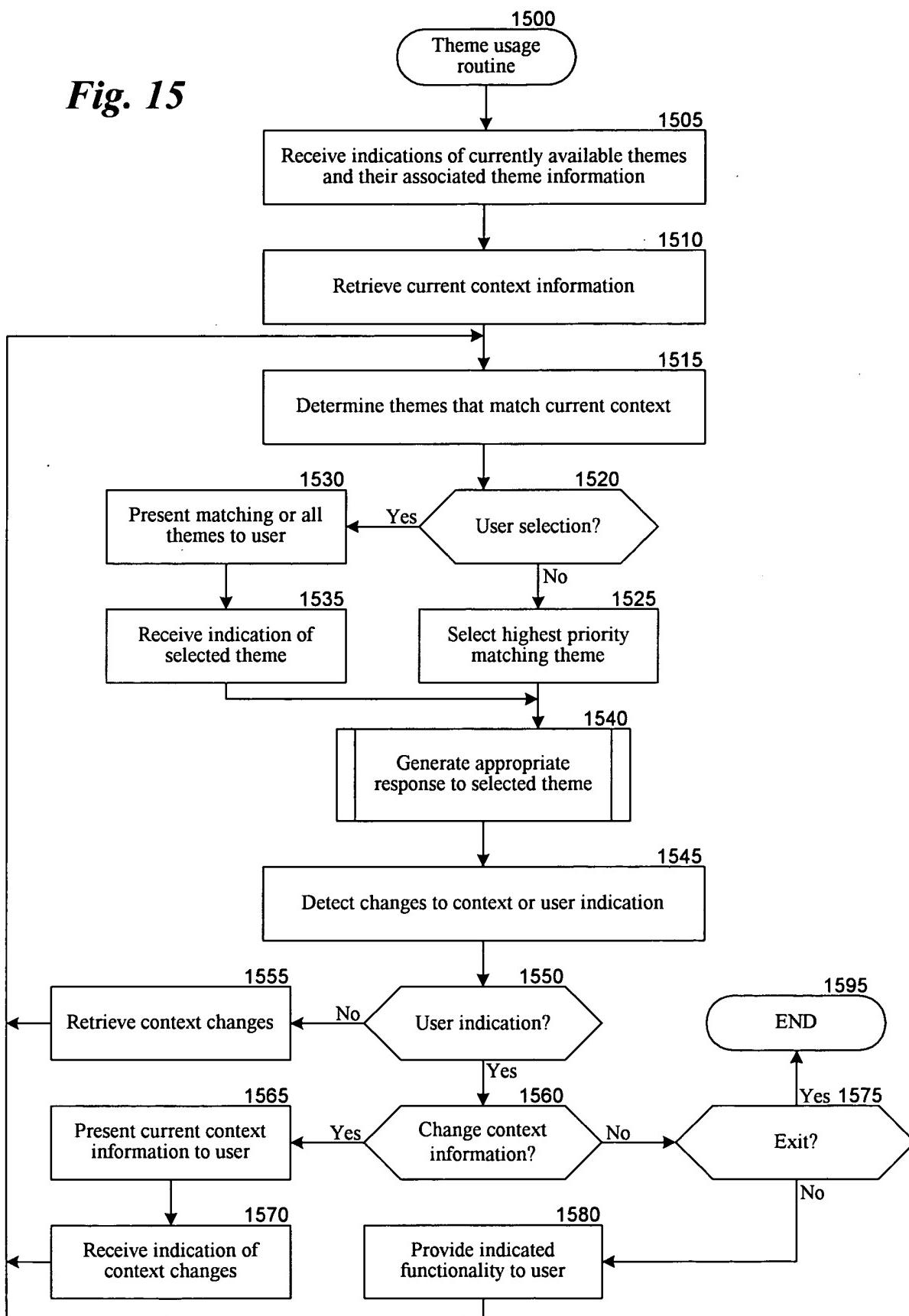
Fig. 15

Fig. 16

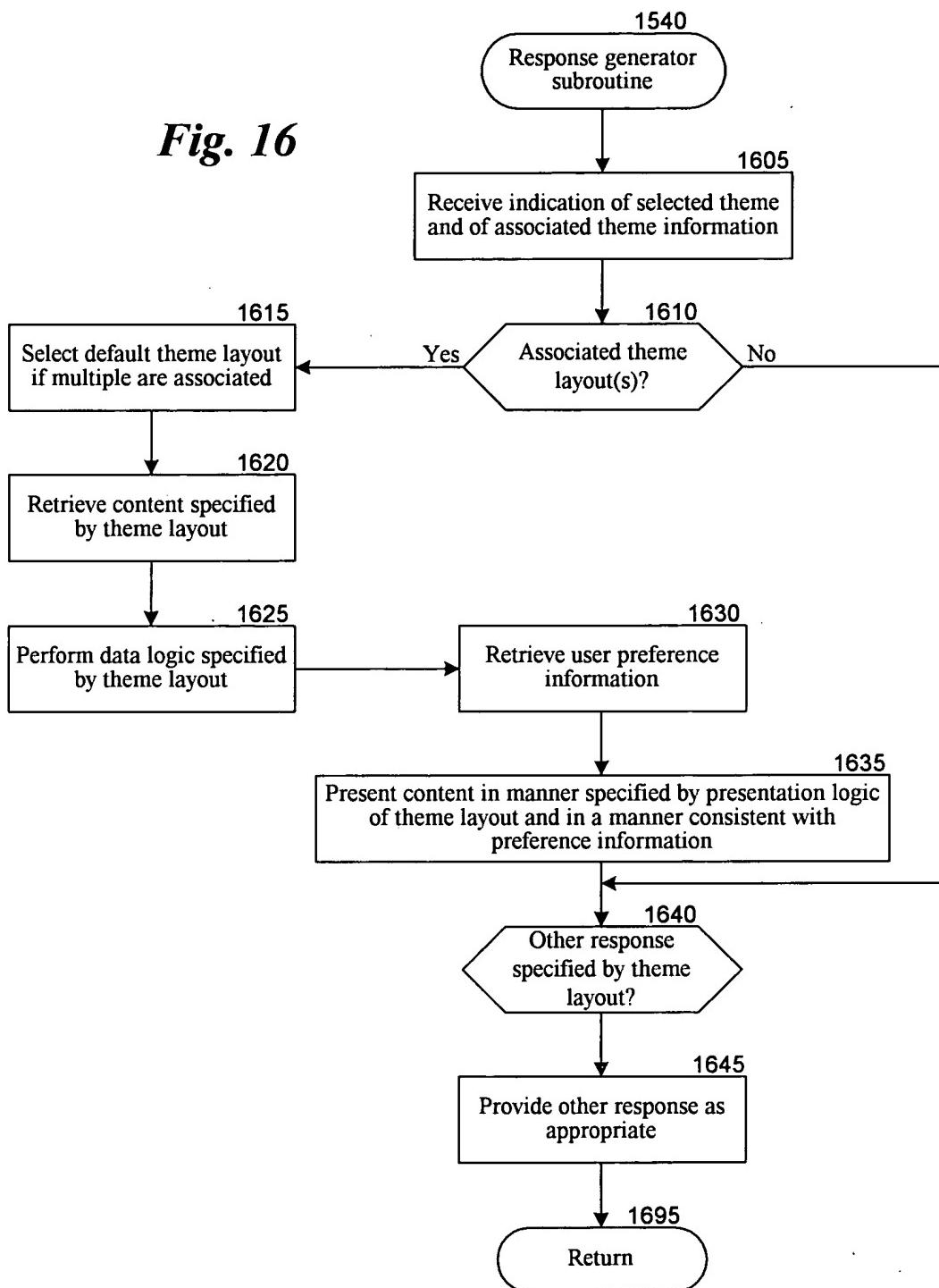


Fig. 17

TOP LEVEL FLOWCHART

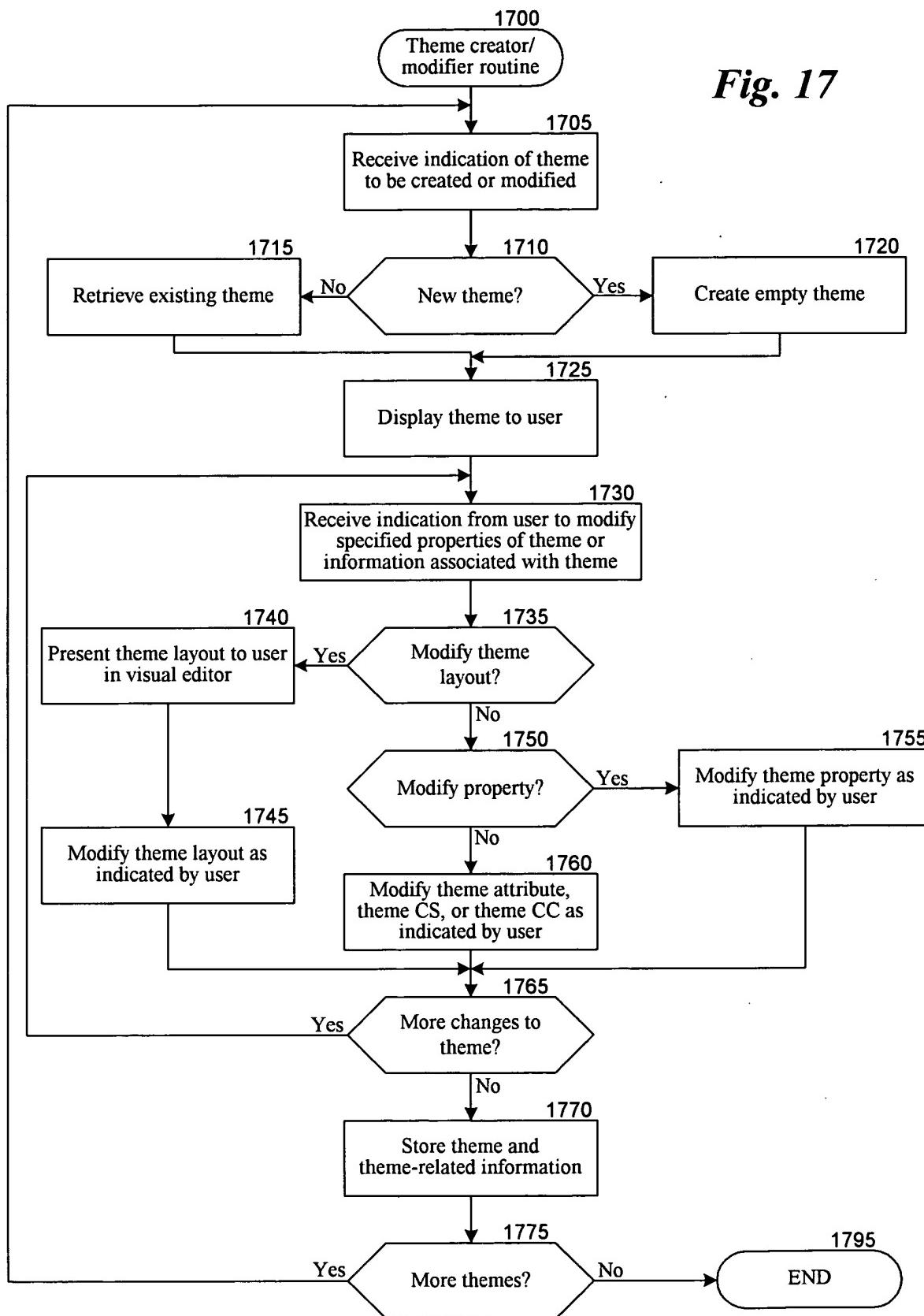


Fig. 18

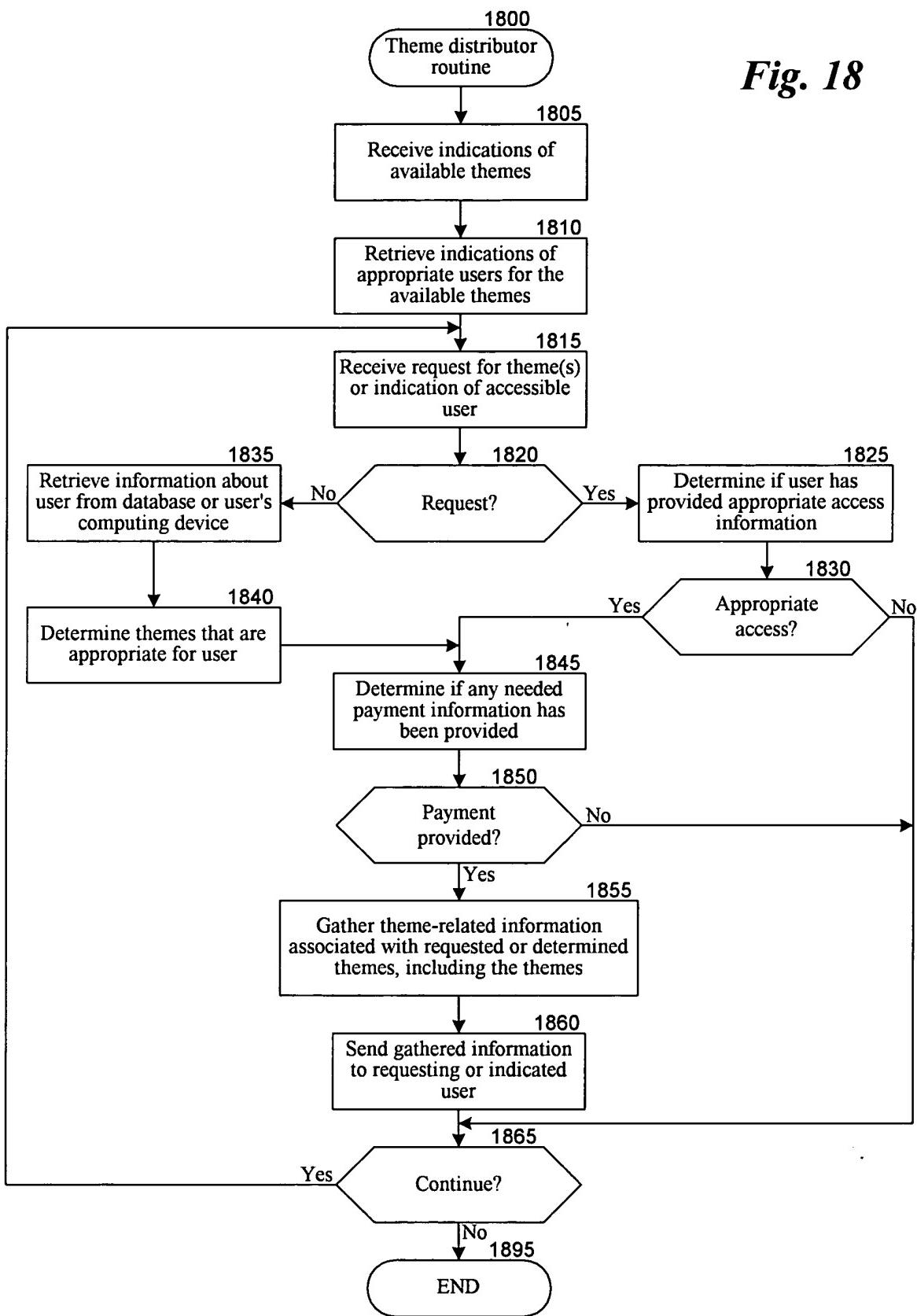
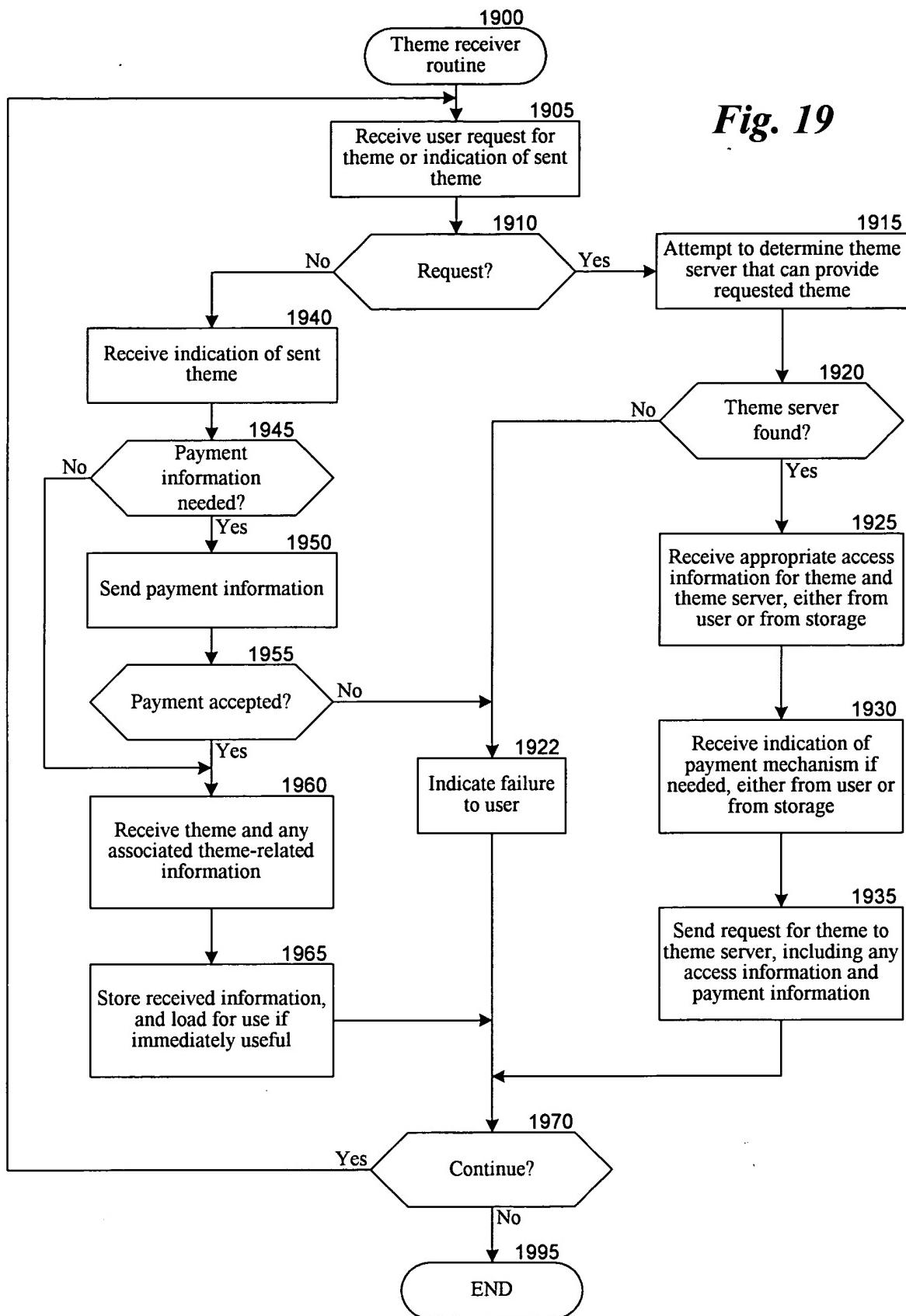


Fig. 19



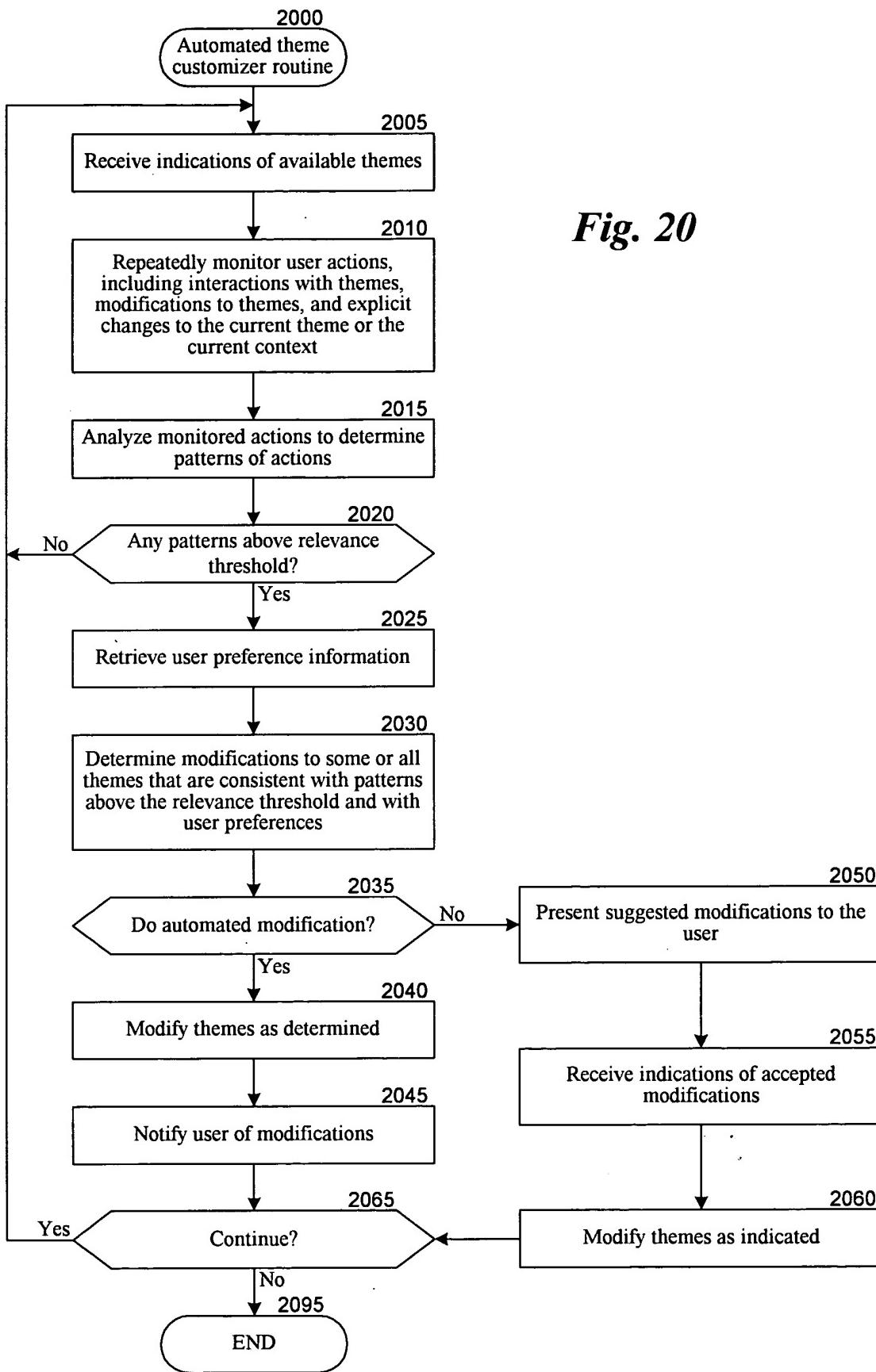


Fig. 20